

Appl. No. 10/081,080
Arndt Dated: April 1, 2005
Reply to Office Action of November 3, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A battery connector for a mobile phone, installed in a main body of the mobile phone and contacting a battery terminal to supply power to a printed circuit board (PCB) of the mobile phone, the battery connector comprising:
 - a body having a plurality of plunger housings;
 - a plunger slidably installed in each of the plurality of plunger housings of the body;
 - a base cover member having a cylindrical connection part fitted in a lower end of each of the plurality of plunger housings, a bottom surface of the base cover member adhered to the PCB by soldering and made of conductive material; and
 - a coil-type spring biasing the plunger in the plunger housing against the bottom of the base cover member.

2. (Currently Amended) An electric connector for providing electric connection between an electric power source and an operating member, comprising:
 - a contact plunger for making contact with the electric power source, the contact plunger being made of conductive material;
 - a housing for slidably receiving the contact plunger;
 - a coil-type spring disposed under the contact plunger inside the housing, for providing the contact plunger with elasticity and being made of conductive material; and
 - a base member disposed between the housing and the operating member, for fixing the housing at a selected region on the operating member, the base member being made of conductive material.

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3. (Currently Amended) The electric connector of claim 2, wherein the contact plunger comprises:

a contact portion for making direct contact with the electric power source, the contact portion protruding from an upper opening of the housing;

a guide portion slidably disposed inside the housing, the guide portion having contact with inner surface of the housing; and

a spring fixing portion extending downward from a lower end of the guide portion, the spring fixing portion being disposed to be engaged with the coil-type spring.

4. (Previously Presented) The electric connector of claim 3, wherein the housing comprises:

a shoulder formed at the upper opening of the housing, the shoulder extending inward from edge of the upper opening of the housing; and

a coupling groove formed on an outer surface at a lower end of the housing, the coupling groove being disposed to be engaged with the base member.

5. (Previously Presented) The electric connector of claim 4, wherein the shoulder makes direct contact with an upper edge of the guide portion of the contact plunger in response to elastic movement of the spring.

6. (Previously Presented) The electric connector of claim 4, wherein the base member comprises a connection part formed at an upper end of the base member, the connection part having a cylindrical shape to be fitted with the coupling groove of the housing.

7. (Previously Presented) The electric connector of claim 6, wherein the base member is soldered at the selected region on the operating member.

8. (Previously Presented) The electric connector of claim 2, wherein the electric power source is a battery having a terminal to be in contact with the contact plunger.

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9. (Previously Presented) The electric connector of claim 8, wherein the operating member is a circuit board for receiving electric power from the battery.

10. (Previously Presented) The electric connector of claim 8, wherin the electric connector, the circuit board, and the battery are included in a mobile phone.